THE DISCOMYCETES OF THE MIAMI VALLEY, OHIO.

BY A. P. MORGAN.

The collections of several years enable me at this present time to increase very considerably the list of the species of Discomycetes growing in this region, since the publication of Lea's Catalogue in 1849. Many specimens have been sent to Chas. H. Peck, the State Botanist of New York, and many also to Mr. J. B. Ellis of New Jersey. Upwards of sixty numbers were sent to George Massee of the Royal Herbarium, Kew, England; these were chiefly small Pezizeae not figured in Cooke's Mycographia. Among these Mr. Massee detected several new species which he described and figured. I have also profited much by the papers published recently by Mr. Massee, in the Journal of the Linnaean Society and entitled "Redescriptions of Berkeley's Types of Fungi."

The classification of the Discomycetes is as yet tentative; no two writers divide the order similarly into families and genera. Hence in making up only a catalogue, I have been obliged to survey critically the nomenclature. In doing so I have indicated my notion in regard to genera and species; in many places I have suggested the correct writing of the specific names, on the accepted principle of priority; and I have also been able to describe the spores and give the spore measurements of some of de Schweinitz's little known species.

1. COCCOMYCES TRIANGULARIS Saccardo, Sylloge VIII. 1889.
   Cenangium triangulare Fries, Syst. Myc. II. 1823.
   Peziza triangularis Schweinitz, Syn. Car. 1822.

2. SCHIZOXYLON SEPINCOLUM Persoon, Ann. Wetter. 1810.
   Limboria sepincola Acharius, Acta. Holm. 1815.
   Schizoxylon persoonii Schweinitz, N. A. Fungi. 1834.

3. SCHIZOXYLON OCCIDENTALE E. & E., Journ. Mycol. I. 1834.
   Saccardo, Sylloge VIII. 1889.

4. SCHIZOXYLON CINEREUM E. & E., (Ined.)

5. LICHENOPSIS SPHAEROBOLOIDEA Schweinitz, N. A. Fungi. 1834.

6. RHYTISMA PUNCTATUM Fries, Syst. Myc. 1823.
   Xyloma punctatum Persoon, Obs. Myc. 1798.

7. STICTIS RADIATA Persoon, Obs. Myc. 1798.
   LICHEN EXCAVATUS Hoffman, En. Lich. 1784.
   LYCOPERDON RADIATUM Linn. according to Fries, Syst. Myc. III is Diderma stellare. See also Fries's Index.

8. PROPOLIS FAGINEA Karsten, Myc. Fenn. 1871.
Stictis versicolor Fries, Syst. Myc. 1823.
Hysterium fagineum Schrader, Journ. Bot. 1799.

9. MELITTOSPORIUM HYSTERINUM Gillet, Disc. Fr. 1879.
Stictis hysterina Fries, Syst. Myc. 1823.

10. KARSCHIA LIGNYOTA Saccardo, Sylloge VIII. 1889.
Patellaria lignyota Fries, S. V. Scand. 1849.
Peziza lignyota Fries, Syst. Myc. 1823.

11. KARSCHIA STYGIA Massee, Berk. Types. 1901.
Patellaria stygia B. & C., N. A. Fungi. 1875.
Patellea stygia Saccardo, Sylloge VIII. 1889.

12. PATELLARIA ATRATA Fries, Syst. Myc. 1823.
Peziza patellaria Persoon, Synopsis. 1801.
Lichen atratus Hedwig, Musc. frond. 1787.
"Typus generis est P. atrata," Fries, S. O. V. 114. The name Patellaria was once used extensively for a genus of Lichens. This species is to be distinguished from P. clavispora by the thicker asci and larger spores. Asci 100-130 x 17-19 mic. Spores 7-10 septate, 36-46 x 8-10 mic. The asci vary in the number of their spores.

13. PATELLARIA CLAVISPORA B. & Br., Am. Nat. Hist. 1854.
Durella clavispora Saccardo, Sylloge VIII. 1889.
This species is commonly confused with P. atrata. Asci 90-110 x 11-13 mic. Spores 5-8 septate, 28-35 x 6-8 mic.

14. PATELLARIA TETRASPORA Massee & Morgan n. sp. — Ascophore applanate, usually elliptical, margin very slightly upraised, and more or less distinctly vertically striate, entirely black, 0.5-1 mm. long; asci cylindrical, rather abruptly narrowed into a slender pedicel, apex rounded and slightly thickened, not blue with iodine, 140-160 x 12-14 mic., four spored; spores hyaline, smooth, narrowly clavate, apex blunt, base rather acute, 7-9 septate at maturity 1 seriate, 40-50 x x10-11 mic.; paraphyses numerous, slender tips thickened, deep blackish blue, agglutinated together.
On dead wood of Juglans cinerea. Preston, Ohio. A. P. Morgan. n. 25. March 1888. Allied to Patellaria clavispora B. & Br. but differs in the tetrasporic asci, and the larger spores.

15. LECIOGRAPHA TRISEPTATA Morgan.
Mycolecidea triseptata Karsten, Symb. XXVI.
Patellaria triseptata Saccardo, Sylloge VIII. 1889.

16. LECIOGRAPHA CLAVISPORA Morgan.
Tryblidium clavisporum Peck, 35th N. Y. Rep. 1882.
Patellaria clavispora Saccardo, Sylloge VIII. 1889.

This species is also referable to Pseudotryblidium Rehm, if it is desirable to multiply genera, but Saccardo's Patellaria is not tenable.

17. HOLWAYA GIGANTEA Durand, Bull. Torr. Bot. Club. 1901.
Stilbum giganteum Peck, 24th N. Y. Rep. 1871.
Holwaya ophiobolus Saccardo, Sylloge VIII. 1889.
Bulgaria ophiobolus Ellis, Am. Nat. 1883.

18. URNULA CRATERIUM Fries, S. V. Scand. 1849.
Dermea craterium Schweinitz, N. A. Fungi. 1834.
Cenangium craterium Fries, Elenchus. 1828.
Peziza craterium Schweinitz, Syn. Car. 1822.

19. MIDOTIS PLICATA Phillips & Harkness, Bulletin of the California Academy of Sciences. 1884.

"Resembles *M. irregularis* (Schw.) but differs in the smaller bi-nucleate curved sporidia and the longitudinally plicate hymenium."

20. TYMPANIS FRAXINI Fries, Syst. Myc. 1823.
Peziza fraxini Schweinitz, Syn. Car. 1822.

21. TYMPANIS CONSPERSA Fries, Syst. Mycol. 1823.
Peziza sphaerioides Roth, Usteri. Ann. 1791.

22. CENANGELLA VIOLACEA E. & E., Proc. Ac. Nat. Sc. Philadelphia. 1893.

23. SCLERODERRIS RUBRA Morgan, Journ. Cin. Soc. Nat. Hist. 1895.

It is possible that this species is Rhytidopeziza nigro-cinnabarina, Spegazzini. Fungi Guaranitici I. 1883. This claims to be the real Patellaria nigro-cinnabarina, Schweinitz. N. A. Fungi. 1834. Then again the latter is said to be the Hysterium rufulum of Sprengel. Schweinitz's species stands as Blitrydium nigro-cinnabarinum in Saccardo's Sylloge VIII. 1889.

24. ORBILIA RUBELLA Karsten, Myc. Fenn. 1871.
Peziza rubella Persoon, Synopsis. 1801.

25. ORBILIA VINOSA Karsten, Myc. Fenn. 1871.
Peziza vinosa Persoon, Synopsis. 1801.

26. ORBILIA RUBRO-COCCINEA Saccardo, Sylloge. VIII. 1889.
Calloria rubro-coccinea Rehm, Hedwigia. 1883.

27. ORBILIA EPIPORA Karsten, Myc. Fenn. 1871.
var. major Spegazzini, F. Arg. 1880.

28. ORBILIA LEUCOSTIGMA Fries, S. V. Scand. 1849.
Peziza leucostigma Fries, Obs. Myc. 1815.

29. ORBILIA XANTHOSTIGMA Fries, S. V. Scand. 1849.
Peziza xanthostigma Fries, Obs. Myc. 1815.

30. ORBILIA CRUENTA Morgan.
Orbilia rufula Massee, Berkeley's Types. 1901.
Peziza regalis C. &. E. Grevillea. 1878.
Peziza fibriseda, Peziza saccharifera B. & C., N. A. Fungi. 1875.
Peziza cruenta, Peziza rufula Schweinitz, N. A. Fungi. 1834.

31. BULGARIA RUFA Schweinitz, N. A. Fungi. 1834.
Asci cylindric, with a long slender stalk, the spores obliquely uniseriate, the sporiferous part of the ascus 125-135 x 11-14 mic. Spores simple, hyaline, elliptic-oblong, 18-22 x 9-10 mic.

32. BURCARDIA TURBINATA Schmidel, Icones, Tab. LXX.
Peziza sessilis infundibuliformis, etc., Haller, Hist. St. 1768.
Tremella agaricoides Retzius, Act. Holm. 1769.
Elvela pulla Schaeffer, Index, 1774.
Peziza polymorpha Lightfoot, Fl. Scot. 1777.
Polymorphus tremelloides "Naum. diss. Erf. 1782."
Peziza brunnea Batsch, El. Fung. 1783.
Octospora elastica Hedwig, Musc. frond. 1787.
Peziza nigra Bulliard, Champ. 1791.
Peziza inquinans Persoon, Disp. 1797.
Bulgaria inquinans Fries, Syst. Myc. 1823.

33. ANGELINA CONGLOMERATUS Fries, S. V. Scand. 1849.
Ascobolus conglomeratus Schweinitz, N. A. Fungi. 1834.
This is said to be the same thing as Hysterium rufescens Schw. It is strange that neither Schweinitz nor Fries perceived their identity.

34. CORYNE PURPUREA Fuckel, Symb. Myc. 1869.
Elvela purpurea Schaeffer, Index, 1774.
Spores hyaline, fusiform, 3-5 septate, 20-25 x 5-6 mic.

35. ASCOBOLUS FURFURACEUS Persoon, Obs. Myc. I. 1796.
Peziza stercoraria Bulliard, Champ. 1791.
Elvella fimetaria Scopoli, Ann. Hist. Nat. 1772.

36. ASCOBOLUS BRUNNEUS Cooke, Hedwigia, VI. 1867.

37. LASIOBOLUS EQUINUS Karsten, Syn. Arc. 1885.
Peziza equina Muller, Flora Danica.
Peziza papillata Persoon, Synopsis. 1801.

38. RYPAROBUS PELLETIERI Saccardo, Mich. I. 1877.
Ascobolus pelletieri Crouan, Ann. Sc. Nat. 1857.

39. MOLLISIA ATROCINEREA Phillips, Brit. Disco. 1887.
Peziza atrocinerea Cooke, Fung. Brit. Ser. I. 382.
Peziza Polygoni. Lasch., in Rab. Herb. Myc. 1127.

40. MOLLISIA CINEREA Karsten, Myc. Fenn. 1871.
Peziza cinerea Batsch, El. Fung. cont. 1789.

41. MOLLISIA FUSCA Massee, Fung. Fl. 1895.
Trichopeziza fusca Saccardo, Sylloge. VIII. 1889.
Peziza fusca Schumacher, En. Plant. 1803.

42. BELONIDIUM ALBUM Saccardo, Sylloge, VIII. 1889.
Lecanidion album Crouan, Fl. Finist. 1867.

This is truly a Peziza; there is little to the ascoma besides the asci and paraphyses. It grows on old hyphae of Helminthosporium.

43. STAMNARIA AMERICANA Massee & Morgan n. sp. —

Erumpent, gregarious or crowded in clusters of three or four, sessile or with a very short stem-like base, about ½ mm. across and high, thin, translucent, margin scarious, uneven, entirely pale amber when dry, concave; asci clavate, apex rounded, not blue with iodine, 8-spored, 170 x 15-16 mic.; spores irregularly 2-seriate, hyaline, smooth, continuous narrowly elliptic-fusiform, often slightly inaequilateral, 2-guttulate, 26-29 x 7-8 mic.; paraphyses slender, tips slightly clavate, often branched; excipulum and cortex formed of very slender septate hyphae running from base to margin.

On dead stems of Equisetum hyemale Preston, O. Entire fungus delicate, thin, soon collapsing. Readily distinguished from S. equiseti in the much larger asci and spores.

44. HELOTIUM CITRINUM Fries, S. V. Scand. 1849.
Octospora citrina Hedwig, Musc. frond. 1787.

Helotium confluens Schweinitz, N. A. Fungi, does not seem to be different from this species.

45. HELOTIUM VIRGULTORUM Fries, S. V. Scand. 1849.
Phialea virgultorum Saccardo, Sylloge. VIII. 1889.
Peziza virgultorum Vahl, Flora Dan. Tab. 1016.
Octospora fungoidaster Hedwig, Musc. frond. 1787.
Peziza flaviscens, petiolata, etc. Haller, Hist. St. 1768. By Persoon and Fries this species was included as a variety in P. fructigena.

46. HELOTIUM SCUTULA Karsten, Myc. Fenn. 1871.
Phialea scutula Saccardo, Sylloge, VIII. 1889.
Peziza scutula Persoon, Myc. Eur. 1822.

As defined by later writers there seems little difference between this species and P. virgultorum except that it grows on herbaceous stems.

47. HELOTIUM FRUCTIGENUM Fuckel, Symb. Myc. 1869.
Peziza fructigena Bulliard, Champ. 1792.

Massee includes this species as a variety in H. virgultorum.

48. HELOTIUM CALYCULUS Fries, S. V. Scand. 1849.
Phialea calyculus Saccardo, Sylloge VIII. 1889.
Peziza calyculus Sowerby, Eng. Fungi. 1799.

49. HELOTIUM DISCRETUM Karsten, Myc. Fenn. 1871.
On old pod of Gleditschia.

50. HELOTIUM GALBULA Karsten, Myc. Fenn. 1871.
Phialea galbula Saccardo, Sylloge, VIII. 1889.

51. HELOTIUM CROCINUM B. & C., Cuban Fungi. 1869. Massee, Berk. Types. 1901.

52. HELOTIUM DELECTABILE Massee & Morgan n. sp. —
Ascophore stipitate, at first closed by the incurved margin, disc finally plane, clear crimson, permanently marginate, up to 1 mm. broad, externally even, glabrous, whitish with a tinge of pink, narrowing downwards into a short, stout, pale stem; asci 90 x 10 mic., clavate, apex slightly thickened, pore blue with iodine, 8-spored; spores obliquely 1-seriate, hyaline, continuous smooth, narrowly elliptic-fusiform, 12-13 x 4 mic. paraphyses slender, tips scarcely thickened, tinged red.
On slender twigs. Preston, Ohio, U. S. A. Allied to Helotium geurnisaci Crouan.

53. HELOTIUM CHLORA Morgan.
Chlorosplenium chlora Massee, Berk. Types. 1901.
Peziza chlora Schweinitz, Syn. Fung. Car. 1822.
Chlorosplenium schweinitzii Fries, S. V. Scand. 1849.
Peziza crocitincta B. & C., Grevillea, I 1872 and III 1875.
Pezizella crocitincta Saccardo, Sylloge, VIII. 1889.
Specimens examined from Schweinitz, Berkeley and Fries; not by any means uncommon in the United States. The colour ranges from yellowish-green, through clear yellow, to orange or saffron; all shades may sometimes be seen in the same group of specimens." (George Massee.)

54. CIBORIA RENISPORA Saccardo, Sylloge, VIII. 1889.
Ciboria sydowiana Rehm, Hedwigia, 1885.
Helotium renisporum Ellis, Bull. Buff. 1875. Massee, Fungus Flora. 1895.
The spores are not correctly given in the Sylloge. C. tabacina E. & Holw. does not appear to be a different species.

55. CHLOROSPLENIUM AERUGINOSUM De Notaris, Discom. 1864.
Helotium aeruginosum Fries, S. V. Scand. 1849.
Peziza aeruginosa Vahl, Fl. Dan. Tab. 1260.
Helvella aeruginosa Oeder, Fl. Dan. Tab. 534.
Peziza viridissima, etc. Haller, Hist. Stirp. 1768.
Peziza aeruginascens Nylander, Obs. Pez. 1868.

56. CHLOROSPLENIUM VIRIDE Morgan.
Cantharellus viridis Schweinitz, N. A. Fungi. 1834.
Peziza aeruginascens Nylander, Obs. Pez. 1868.

57. CHLOROSPLENIUM VERSIFORME Karsten, Myc. Fenn. 1871.
Helotium versiformis Fries, S. V. Scand. 1849.
Peziza versiformis Persoon, Ic. & Desc. 1800.

The genus Chlorosplenium was established by Fries for the reception of Peziza chlora, P. chlorascens and P. torta of Schweinitz under the mistaken notion that "the disk is rendered green-pulverulent by the bursting of the asci and pouring out of the spores." In the same connexion Peziza aeruginosa and P. versiformis were placed in Helotium.

It is doubtful whether Peziza chlora, P. chlorascens, P. torta belong in Chlorosplenium as now understood. The generic type at present is rather Chlorosplenium aeruginosum, which colors the wood on which it grows a deep verdigris-green.

58. PEZICULA CARPINEA Tulasne, S. F. Carp. 1865.
Dermatea carpinea Fries, S. V. Scand. 1849.
Patellaria carpinea Berkeley, Lea's Cat. 1849.
Peziza carpinea Ehrhardt, Pl. crypt. ex. 130. See Persoon, Synopsis. 1801.

59. TAPESIA AURELIA Phillips, Brit. Disco. 1887.
Belonidium auratum Saccardo, Mich. I. 1877.
Arachnopeziza aurelia Fuckel, Symb. Myc. 1869.
Belonidium aurelia De Notaris, Prop. Disc. 1864.
Peziza aurelia Persoon, Myc. Eur. 1822.

60. TAPESIA ARACHNOIDEA Saccardo, Sylloge, VIII. 1889.
Peziza candido-fulva Schweinitz, N. A. Fungi. 1834.
Peziza rhabdosperma B. & Br., Ann. Nat. Hist. 1876.
Arachnopeziza aurata Fuckel, Symb. Myc. 1870.
Peziza arachnoidea Schweinitz, N. A. Fungi. 1834.
Mr. Massee determined the specimen as Tapesia aurata.

61. TAPESIA CANDIDO-FULVA Saccardo, Sylloge, VIII. 1889.
Peziza candido-fulva Schweinitz, N. A. Fungi. 1834.

The ascoma differs from that of T. aurelia in the tawny-brown fasciculate hairs on the margin. The asci are cylindric-clavate, 60-70 x 7-8 mic.; the spores are fusiform-clavate, simple or 1-septate, 11-16 x 3 mic.

62. **TAPESIA MOLLISIOIDES** Saccardo, Mich. II. 1880.
Peziza mollisiaeoides Schweinitz, N. A. Fungi. 1834.

63. TAPESIA SANGUINEA Fuckel, Symb. Myc. 1869.
Peziza sanguinea Persoon, Disp. 1797.

64. TAPESIA CAESIA Fuckel, Symb. Myc. 1869.
Peziza caesia Persoon, Synopsis. 1801.
Peziza lichenoides Persoon, Ic. & Descrip. 1800.

65. TAPESIA DERELICTA Morgan sp. nov. — Ascophore subcupulate, more or less irregular, rufescent, externally furfuraceous, seated on a thin white subiculum, close or crowded and sometimes confluent. Asci cylindric, stipitate, 90-100 x 7-8 mic., 8-spored, the spores obliquely uniseriate; paraphyses filiform. Spores cylindric-clavate, hyaline, 1-sepate, 12-15 x 3 mic.

Growing on old wood and mosses; Preston, Ohio. Ascophore 1-2 mm. in diameter, when fresh closely crowded so as to almost conceal the thin subiculum, but when dry the fleshy cups are much contorted disclosing the white threads between. I suspect this to be the lost Peziza bloxami B. & Br.

66. TAPESIA FUSCA, T. rosae, T. prunicola, Fuckel, Symb. Myc. 1869.
Peziza fusca Persoon, Obs. Myc. 1798.

67. TAPESIA DISCINCOLA Saccardo, Sylloge, VIII. 1889.
Peziza discincola Schweinitz, N. A. Fungi. 1834.
Spores 0-1-septate, clavate-oblong, 7-9 x 2-3 mic.

68. TAPESIA PRUINATA Saccardo, Sylloge, VIII. 1889.
Peziza pruinata Schweinitz, Syn. Car. 1822.
Peziza conspersa Persoon, Myc. Eur. 1822.
Thelebolus hirsutus De Candolle, Fl. Fr. 1805.

This seems to me an imperfect Lichen, a Verrucaria. It grows commonly on the bark of Grape vines, but I never find any fruit; the vegetation is not fungoid.

69. LACHNELLA CORTICALIS Fries, S. V. Scand. 1849.
Peziza corticalis Persoon, Disp. 1797.

70. LACHNELLA CANESCENS Phillips, Brit. Disco. 1887.

71. LACHNELLA RUFO-OLIVACEA Phillips, Brit. Disco. 1887.
Schweinitzia rufo-olivacea Massee, Fung. Flora. 1895.
Velutaria rufo-olivacea Fuckel, Symb. Myc. 1869.
Peziza fraxinicola B. & Br., Ann. Nat. Hist. 1866.
Peziza rufo-olivacea A. & S., Consp. Fung. 1805.

72. LACHNELLA PENICILLATA Morgan.
Trichopeziza penicillata Saccardo, Sylloge, VIII. 1889.
Peziza penicillata Schweinitz, Syn, Car. 1822.

73. LACHNELLA SOLENIIFORMIS E. & E., Journ. Mycol. 1888.
Dasyscypha soleniiformis Saccardo, Sylloge. VIII. 1889.

74. LACHNELLA DEMATIICOLA Phillips, Brit. Disco. 1887.
Trichopeziza dematiicola Saccardo, Sylloge, VIII. 1889.
Peziza dematiicola B. & Br., Ann. Nat. Hist. 1865.
Peziza escharodes B. & Br., Ann. Nat. Hist. 1872.

75. LACHNELLA CHLORASCENS Morgan.
Chlorosplenium repandum Fries, S. V. Scand. 1849.
Peziza chlorascens Schweinitz, N. A. Fungi. 1834.

76. LACHNELLA ATROFUSCATA Saccardo, Sylloge. VIII. 1889.
Peziza atrofuscata Schweinitz, N. A. Fungi. 1834.

77. LACHNELLA HYALINA Phillips, Brit. Disco. 1887.
Pseudohelotium hyalinum Fuckel, Symb. Myc. 1869.
Peziza hyalina Persoon, Disp. 1797.

78. LACHNUM AGARICINUM Retzius, Act. Holm. 1769. Flora Scand. 1795.
Lachnella virginica Phillips, Brit. Disco. 1887.
Lachnum virginicum Karsten, Myc. Fenn. 1871.
Dasyscypha virginica Fuckel, Symb. Myc. 1869.
Peziza virginica Batsch, El. Fung. 1783.

Lachnum niveum (Hedw.) Karsten, appears to be practically indistinguishable from this species. Retzius himself gives it as a synonym.

79. LACHNUM CERINUM Morgan.
Lachnella cerina Phillips, Brit Disco. 1887.
Heliotium cerinum Karsten, Myc. Fenn. 1871.
Dasyscypha cerina Fuckel, Symb. Myc. 1869.

80. LACHNUM LUTEO-ALBUM Morgan.
Dasyscypha luteo-alba Saccardo, Sylloge, VIII. 1889.
Peziza luteo-alba Schweinitz, N. A. Fungi. 1834.

81. LACHNUM VIRIDULUM Masse & Morgan n. sp. —

Gregarious, closed at first then expanding until widely cup-shaped, narrowed below into a very short, stout stem-like base. about .5 mm. across, disc dark green, externally pale green and downy, marginal hairs 60-80 x 3-4 mic., septate; cortex minutely parenchymatous, cells elongated from base to margin; asci cylindrical, apex rounded, 8-spored, 45-50 x 6 mic., spores 2-seriate, continuous, smooth, hyaline, cylindrical, often slightly curved, 7-9 x 2 mic.; pharaphyses filiform.

On dead wood of Quercus alba, Preston, O., readily distinguished by the green colour of every part. Contracted when dry, and looking like minute yellowish-green specks of fluff.

82. PATELLA SCUTELLATA Morgan.
Lachnea scutellata Gillet, Disco. 1879.
Humaria scutellata Fuckel, Symb. Myc. 1869.
Octospora hirta Hedwig, Musc. Fround. 1789.
Patella ciliata Roth, Flora Germ. 1788. Wiggers Fl. Hols. 1780.
Elvella ciliata Schaeffer, Index. 1774.
Peziza scutellata Linnaeus, Sp. Pl. 1753.

83. PATELLA LUTEA Morgan.
Lachnea stercorea Gillet, Disco. 1879.
Peziza stercorea Persoon, Obs. Myc. 1798.
Peziza lutea Reich. in Besch. Berl. 1775 (?).
Elvella lutea Scopoli, Fl. Carn. 1772.

84. PATELLA ERINACEUS Morgan.
Lachnea erinaceus Saccardo, Sylloge, VIII. 1889.
Peziza erinaceus Schweinitz, Syn. Car. 1822.

85. SEPULTARIA ALBIDA Morgan.
Lachnea hemispherica Gillet. Disco, 1879.
Peziza hemispherica Wiggers, Fl. Hols. 1780.
Elvela algida Schaeffer Index 1774.

86. SEPULTARIA SEMITOSTA Morgan.
Macropodia semitosta Saccardo, Sylloge, VII. 1889.
Peziza semitosta B. & C., N. A. Fungi. 1875.

According to Massee in Journal Linn. Society, 1876, Peziza pubida, B. & C. is a synonym of this species.

87. GEOPYXIS COCCINEA Massee, Fungus Flora. 1896.
Sarcoscypha coccinea Saccardo, Sylloge, VIII. 1889.
Lachnea coccinea Gillet, Disco. 1879.
Peziza coccinea Jacquin, Fl. Aust. 1776.
Elvela coccinea Scopoli, Fl. Carn. 1772.

88. GEOPYXIS FLOCCOSA Morgan.
Sarcoscypha floccosa Saccardo, Sylloge, VIII. 1889.
Peziza floccosa Schweinitz, N. A. Fungi. 1834.

Sarcocyphi, Martins, was applied to Peziza stenostorna Mart., and P. rhizopus A. & S. There is no reason for substituting Plectania.

89. GEOPYXIS OCCIDENTALIS Morgan.
Sarcoscypha occidentalis Saccardo, Sylloge, VIII. 1889.
Peziza occidentalis Schweinitz, N. A. Fungi. 1834.

This species is given in Lea's Catalogue. The form I find corresponds better to Geopyxis hesperidea C. & P. Grevillea, I. 1872.

90. GEOPYXIS NEBULOSA Saccardo, Sylloge, VIII. 1889.
Peziza nebulosa Cooke, Mycographia. 1879.

91. BARLAEINA CONSTELLATIO — Barlea constellatio Saccardo Sylloge, VIII. 1889.
Aleuria constellatio Gillet, Disco. 1879.
Peziza constellatio B. & Br. Ann. Nat. Hist. 1875.

92. HUMARIA OMPHALODES Massee, Fungus Flora. 1875.
Pyronema omphalodes Fuckel, Symb. Myc. 1869.
Peziza omphalodes Bulliard, Champ. 1792.

93. HUMARIA SCABRA Morgan.
Humaria granulata Saccardo, Sylloge, VIII. 1889.
Ascobolus granulatus Fuckel, Symb. Myco. 1869.
Peziza granulata Bulliard, Champ. 1792.
Peziza scabra Müller, Fl. Dan. Tab. 655.

94. HUMARIA VITIGENA Massee & Morgan n. sp. — Gregarious, sessile on a broad base, fleshy, 2-3 mm. broad; globose and closed at first, gradually expanding but the extreme margin persistently incurved and minutely silky; externally dingy white, disc glaucous; asci cylindrical apex rounded, plug brown — not blue with iodine, 120 x 12 mic.; spores 8, 1-seriate, broadly ellipitical, ends obtuse, hyaline, smooth, 8-8 x 6-6.5 mic.; paraphyses filiform, slightly thickened at the apex.

On dead twigs of Vitis riparia, Preston, O. The present species is not a typical Humaria, neither can it be considered as agreeing well with any established genus. The excipulum consists entirely of irregularly nodulose cells which are scarcely coloured by iodine but appear refractive as if very thick-walled, and with scarcely any cell contents. Perfectly globose at first, the hymenium gradually developing as in Bulgaria. Substance firm, but not at all cartilaginous or gelatinous.

95. HUMARIA FUSCOCARPA Morgan.
Phaeopeziza fuscocarpa Saccardo, Sylloge, VIII. 1889.
Peziza fuscocarpa Ellis Q Holway, Journ. Mycol. 1885.

96. PHAEOPEZIZA NIGRANS Morgan.
Detonia nigrans Saccardo, Sylloge, XIV. 1899.
Peziza nigrans Morgan, Journ. Cin. Soc. Nat. Hist. 1895.

97. PEZIZA VESICULOSA Bulliard, Champ. 1792.
Peziza lycoperdoides DeCandolle, Fl. Fr. 1805.
Helvella vesculosa Bolton, Hist. Fung. 1788.
Elvella lycoperdoides Scopoli, Fl. Carn. 1772.

98. PEZIZA IRRORATA B. & C., N. A. Fungi. 1875. Massee, Berkeley's Types. 1896.

This was at first referred to Peziza repanda; Massee's description makes the species clear.

99. PEZIZA PALMICOLA B. & C. Cuban Fungi. 1869. Massee, Berkeley's Types. 1896.

This grows in a solitary way with me, always on old Hickory trunks; it resembles Peziza repanda.

100. PEZIZA CLYPEATA Schweinitz, Syn. Car. 1822.
Peziza adnata B. & C. Cuban Fungi. Massee, Berkeley's Types. 1896.

I had always taken this for Psilopezia numularia until I got Massee's work; I supposed the three names to be synonyms.

101. PEZIZA NUMULARIA Morgan.
Psilopezia numularia Berkeley, Lond. Journ. 1847. Lea's Catalogue. 1849. Massee, Berkeley's Types. 1896.

Although the type of this species was sent from Cincinnati by Mr. Lea, I do not appear to have collected it, my specimen examined by Mr. Massee being pronounced Peziza adnata B & C. Aside from the spores, there should be no confounding the two species; The ascophore of one is parenchymatous and of the other wholly prosenchymatous.

102. PEZIZA NANA Massee & Morgan n. sp. — Gregarious sessile, thin, concave, entirely pale brown when dry, up to 6 mm. across, scurfy-pulverulent externally; asci cylindrical, apex rounded, deep blue with iodine, 8-spored, 350 x 12 mic.; spores broadly elliptical, ends obtuse, hyaline, continuous, epispore densely covered with minute warts, 18 x 10 mic. 1-seriate; paraphyses slender, very slightly thickened at the apex; hypothecium and excipulum formed of very slender, interwoven hyphae, passing into a cortex of small parenchymatous cells.

On the ground; Preston, O. The asci and spores are large in proportion to the size of the ascophore.

103. PEZIZA SUCCOSA Berkeley, Ann. Nat. Hist. 1841.
Galactinia succosa Saccardo, Sylloge, VIII. 1889.

104. PEZIZA PUSTULATA Gmelin, Syst. Nat. 1791.
Octospora pustulata Hedwig, Musc. frond. 1787.

105. PEZIZA MORGANI Massee n. sp. — Ascophore cup-shaped, abruptly narrowed into a very short, slightly lacunose, stem-like base, entirely pale brown (when dry), minutely furfuraceous externally, substance thin, not brittle; hypothecium and excipulum formed of interwoven hyphae, passing into a parenchymatous cortex, 2-3 cm. across; asci cylindrical, apex rounded, not blue with iodine, 8-spored, 280-300 x 16-17 mic. spores obliquely 1-seriate, elliptic-fusiform, epispore delicately warted, hyaline, 2-guttulate, 37-40 x 10-12 mic.; paraphyses cylindrical, apex very slightly thickened.

On the ground in woods, Preston, O. A remarkably fine species, very distinct in the large, elliptic-fusiform warted spores.

106. PEZIZA PETERSII B. & C. N. A. Fungi. 1875. Massee, Berkeley's Types. 1896.

107. PEZIZA GRISEO-ROSEA Gerard, Bull. Buff. 1874.

108. PEZIZA ADAE Sadler, Trans. Bot. Soc. Edinburg. 1857.

I have referred to this species specimens of a large thin Peziza growing on the walls and bottom of a cellar.

109. OTIDEA LEPORINA Fuckel, Symb. Myc. 1869.
Peziza leporina Batsch, El. Fung. 1783.
Fungus auriculae leporis forma. Mentzelius, Pug. Rar. 1682.

110. OTIDEA ONOTICA Fuckel, Symb. Myc. 1869.
Peziza onotica Persoon, Synopsis. 1801.
Peziza leporina Sowerby, Eng. Fung. 1797.

111. OTIDEA ALUTACEA Massee, Fungus Flora. 1895.
Peziza alutacea Persoon, Comm. 1800.
Elvela ochracea Schaeffer, Index. 1774.

112. OTIDEA AURANTIA Massee, Fungus-Flora. 1895.
Peziza aurantia Persoon, Comm. 1800.
Elvella coccinea Schaeffer, Index. 1774.

113. OTIDEA COCHLEATA Fuckel, Symb. Myc. 1869.
Peziza cochleata Linnaeus, Sp. Pl. 1753.

The specific name originates with Linnaeus, but the application of it has been various. Recent writers accept the interpretation of Dr. Cooke in Mycographia; in this the spores are smooth.

A very large Peziza grows in this region in early spring, agreeing in form, size, and color with this species, but the spores are minutely roughened. I have called it Peziza badia, Pers. (Helvella cochleata, Bolton); but this plant is said to grow in summer and autumn. It may be the plant called Peziza umbrina by Boudier, but the figure in Mycographia does not look like our plant.

114. ACETABULA VULGARIS Fuckel, Symb. Myc. 1869.
Peziza acetabulum Linnaeus, Sp. Pl. 1753.
Fungoides fuscum acetabuli forma, etc. Micheli, N. P. G. 1749.

115. LEOTIA STIPITATA Schroeter, Pflanzen. 1894.
Leotia viscosa Fries, Syst. Myc. 1823.
Tremella stipitata Bosc., Berl. Mag. 1811.

The pileus in this species is dark green; the spores subfusiform, more or less curved, 16-20 x 4-5 mic.

116. HELVELLA CRISPA Fries, Syst. Myc. 1823.
Phallus crispus Scopoli, Fl. Carn. 1772
Fungoides fungiforme crispum, etc. Micheli. N. P. G. 1749.

117. HELVELLA BARLAE Boudier & Patouillard in Journ de Bot. 1888.

There is a minute pubescence on pileus and stipe.

118. HELVELLA SULCATA Afzelius, Vet. Ac. Hand. 1783.

The specimens of this are 2-3 cm. in hight.

119. HELVELLA ELASTICA Bulliard, Champ. 1785.

120. HELVELLA GRACILIS Peck, 24. N. Y. Rep. 1871.

121. HELVELLA PEZIZOIDES Afzelius, Vet. Ac. Hand. 1783.
Peziza helvelloides Fries, S. V. Scand. 1849.
Helvella helvelloides Massee, Fungus Flora. 1895.

122. HELVELLA EPHIPPIUM Leveille, Ann. Sc. Nat. 1841.

123. HELVELLA CRATERELLA Quelet, Enchiridion. 1886.
Peziza craterella Persoon, Synopsis 1801.
Octospora craterella Hedwig, Musc. froud. 1787.

My note on the fresh specimen is as follows; Stipe 5-6 x 1-1.5 cm. Ascoma 4-7 cm. Asci 200-250 x 16-18 mic. Spores smooth, 18-20 x 12-14 mic. Compare with Massee's account of Helvella macropus.

124. GYROMITRA ESCULENTA Fries, S. V. Scand. 1849.
Helvella esculenta Persoon, Comm. 1800.

This species is recorded in Lea's Catalogue. I have never found it.

125. GYROMITRA COSTATA Cooke, Mycographia. 1879.
Helvella costata Schweinitz, Syn. Car. 1822.

I have two or three times found specimens of what appeared to be this species, but in no instance did they yield spores.

Mature specimens of this species and of G. caroliniana are greatly desired by mycologists; they do not seem to be known at the present time.

126. GYROMITRA BRUNNEA Underwood, Proceedings Indiana Academy of Science. 1893.

In the spring of 1895, this species grew abundantly in our vicinity. One specimen which we weighed, measured and figured, had dimensions as follows; Height 18 cm.; diameter of Pileus 14 cm.; thickness of stipe 8.5 cm.; weight 1 lb. 2 oz.

127. MORCHELLA ESCULENTA Persoon, Synopsis. 1801.
Phallus esculentus Linnaeus, Sp. Pl. 1753.
Boletus esculentus, rugosus, etc. Tournefort. I. R. H. 1719.

128. MORCHELLA PATULA Persoon, Synopsis. 1801.
Phallus patulus Schrank, Baier. Fl. 1789. Gmelin, Syst. Nat. 1791.